Apprenticeship and Industry Training

Baker

Apprenticeship Course Outline

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Alberta

Apprenticeship and Industry Training

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Apprenticeship

Apprenticeship is post-secondary education with a difference. Apprenticeship begins with finding an employer. Employers hire apprentices, pay their wages and provide on-the-job training and work experience. Approximately 80 per cent of an apprentice's time is spent on the job under the supervision of a certified journeyperson or qualified tradesperson. The other 20 per cent involves technical training provided at, or through, a post-secondary institution – usually a college or technical institute.

To become certified journeypersons, apprentices must learn theory and skills, and they must pass examinations. Requirements for certification—including the content and delivery of technical training—are developed and updated by the Alberta Apprenticeship and Industry Training Board on the recommendation of Baker Provincial Apprenticeship Committee.

The graduate of the Baker apprenticeship program is a certified journeyperson who will be able to:

- prepare and bake all types of high quality yeast raised products in commercial quantities.
- produce and decorate various types of cakes, cookies and pastries commonly available in commercial bakeries.
- use efficiently and safely all hand and power operated equipment available in modern bakeries.
- practice good housekeeping procedures and maintain high levels of sanitation.
- apply the basics of management, costing and business controls.

Apprenticeship and Industry Training System

Industry-Driven

Alberta's apprenticeship and industry training system is an industry-driven system that ensures a highly skilled, internationally competitive workforce in more than 50 designated trades and occupations. This workforce supports the economic progress of Alberta and its competitive role in the global market. Industry (employers and employees) establishes training and certification standards and provides direction to the system through an industry committee network and the Alberta Apprenticeship and Industry Training Board. The Alberta government provides the legislative framework and administrative support for the apprenticeship and industry training system.

Alberta Apprenticeship and Industry Training Board

The Alberta Apprenticeship and Industry Training Board provide a leadership role in developing Alberta's highly skilled and trained workforce. The board's primary responsibility is to establish the standards and requirements for training and certification in programs under the Apprenticeship and Industry Training Act. The board also provides advice to the Minister of Advanced Education on the needs of Alberta's labour market for skilled and trained workers, and the designation of trades and occupations.

The thirteen-member board consists of a chair, eight members representing trades and four members representing other industries. There are equal numbers of employer and employee representatives.

Industry Committee Network

Alberta's apprenticeship and industry training system relies on a network of industry committees, including local and provincial apprenticeship committees in the designated trades, and occupational committees in the designated occupations. The network also includes other committees such as provisional committees that are established before the designation of a new trade or occupation comes into effect. All trade committees are composed of equal numbers of employer and employee representatives. The industry committee network is the foundation of Alberta's apprenticeship and industry training system.

Local Apprenticeship Committees (LAC)

Wherever there is activity in a trade, the board can set up a local apprenticeship committee. The board appoints equal numbers of employee and employer representatives for terms of up to three years. The committee appoints a member as presiding officer. Local apprenticeship committees:

- monitor apprenticeship programs and the progress of apprentices in their trade, at the local level
- make recommendations to their trade's provincial apprenticeship committee (PAC) about apprenticeship and certification in their trade
- promote apprenticeship programs and training and the pursuit of careers in their trade
- make recommendations to the board about the appointment of members to their trade's PAC
- help settle certain kinds of disagreements between apprentices and their employers
- carry out functions assigned by their trade's PAC or the board

Provincial Apprenticeship Committees (PAC)

The board establishes a provincial apprenticeship committee for each trade. It appoints an equal number of employer and employee representatives, and, on the PAC's recommendation, a presiding officer - each for a maximum of two terms of up to three years. Most PAC's have nine members but can have as many as twenty-one. Provincial apprenticeship committees:

- Make recommendations to the board about:
    - standards and requirements for training and certification in their trade
    - courses and examinations in their trade
    - apprenticeship and certification
    - designation of trades and occupations
    - regulations and orders under the Apprenticeship and Industry Training Act
- monitor the activities of local apprenticeship committees in their trade
- determine whether training of various kinds is equivalent to training provided in an apprenticeship program in their trade
- promote apprenticeship programs and training and the pursuit of careers in their trade
- consult with other committees under the Apprenticeship and Industry Training Act about apprenticeship programs, training and certification and facilitate cooperation between different trades and occupations
- consult with organizations, associations and people who have an interest in their trade and with employers and employees in their trade
- may participate in resolving certain disagreements between employers and employees
- carry out functions assigned by the board

Baker PAC Members at the Time of Publication

Mr. P. Schwabenbauer	Edmonton	Presiding Officer
Mr. I. Bragoli	Calgary	Employer
Mr. C. Brouse	Edmonton	Employer
Mr. D. Dornn	Edmonton	Employer
Mr. B. Jaeger	Edmonton	Employer
Mr. M. Curtis	Leduc	Employee
Mr. J. John	Calgary	Employee
Mr. J. Sherlock	Edmonton	Employee

Alberta Government

Alberta Advanced Education works with industry, employer and employee organizations and technical training providers to:

- facilitate industry's development and maintenance of training and certification standards
- provide registration and counselling services to apprentices and employers
- coordinate technical training in collaboration with training providers
- certify apprentices and others who meet industry standards

Technical Institutes and Colleges

The technical institutes and colleges are key participants in Alberta's apprenticeship and industry training system. They work with the board, industry committees and Alberta Advanced Education to enhance access and responsiveness to industry needs through the delivery of the technical training component of apprenticeship programs. They develop lesson plans from the course outlines established by industry and provide technical training to apprentices.

Apprenticeship Safety

Safe working procedures and conditions, incident/injury prevention, and the preservation of health are of primary importance in apprenticeship programs in Alberta. These responsibilities are shared and require the joint efforts of government, employers, employees, apprentices and the public. Therefore, it is imperative that all parties are aware of circumstances that may lead to injury or harm.

Safe learning experiences and healthy environments can be created by controlling the variables and behaviours that may contribute to or cause an incident or injury. By practicing a safe and healthy attitude, everyone can enjoy the benefit of an incident and injury free environment.

Alberta Apprenticeship and Industry Training Board Safety Policy

The Alberta Apprenticeship and Industry Training Board (board) fully supports safe learning and working environments and emphasizes the importance of safety awareness and education throughout apprenticeship training- in both on-the- job training and technical training. The board also recognizes that safety awareness and education begins on the first day of on-the-job training and thereby is the initial and ongoing responsibility of the employer and the apprentice as required under workplace health and safety training. However the board encourages that safe workplace behaviour is modeled not only during on-the-job training but also during all aspects of technical training, in particular, shop or lab instruction. Therefore the board recognizes that safety awareness and training in apprenticeship technical training reinforces, but does not replace, employer safety training that is required under workplace health and safety legislation.

The board has established a policy with respect to safety awareness and training:

> **The board promotes and supports safe workplaces, which embody a culture of safety for all apprentices, employers and employees. Employer required safety training is the responsibility of the employer and the apprentice, as required under legislation other than the *Apprenticeship and Industry Training Act.***

The board's complete document on its 'Apprenticeship Safety Training Policy' is available at www.tradesecrets.alberta.ca; access the website and conduct a search for 'safety training policy'.

Implementation of the policy includes three common safety learning outcomes and objectives for all trade course outlines. These common learning outcomes ensure that each course outline utilizes common language consistent with workplace health and safety terminology. Under the title of 'Standard Workplace Safety', this first section of each trade course outline enables the delivery of generic safety training; technical training providers will provide trade specific examples related to the content delivery of course outline safety training.

Workplace Health and Safety

A tradesperson is often exposed to more hazards than any other person in the work force and therefore should be familiar with and apply the Occupational Health and Safety Act, Regulations and Code when dealing with personal safety and the special safety rules that apply to all daily tasks.

Workplace Health and Safety (Alberta Employment, Immigration and Industry) conducts periodic inspections of workplaces to ensure that safety regulations for industry are being observed.

Additional information is available at www.worksafely.org

Technical Training

Apprenticeship technical training is delivered by the technical institutes and many colleges in the public post-secondary system throughout Alberta. The colleges and institutes are committed to delivering the technical training component of Alberta apprenticeship programs in a safe, efficient and effective manner. All training providers place great emphasis on safe technical practices that complement safe workplace practices and help to develop a skilled, safe workforce.

The following institutions deliver Baker apprenticeship technical training:

Northern Alberta Institute of Technology Southern Alberta Institute of Technology

Procedures for Recommending Revisions to the Course Outline

Advanced Education has prepared this course outline in partnership with the Baker Provincial Apprenticeship Committee.

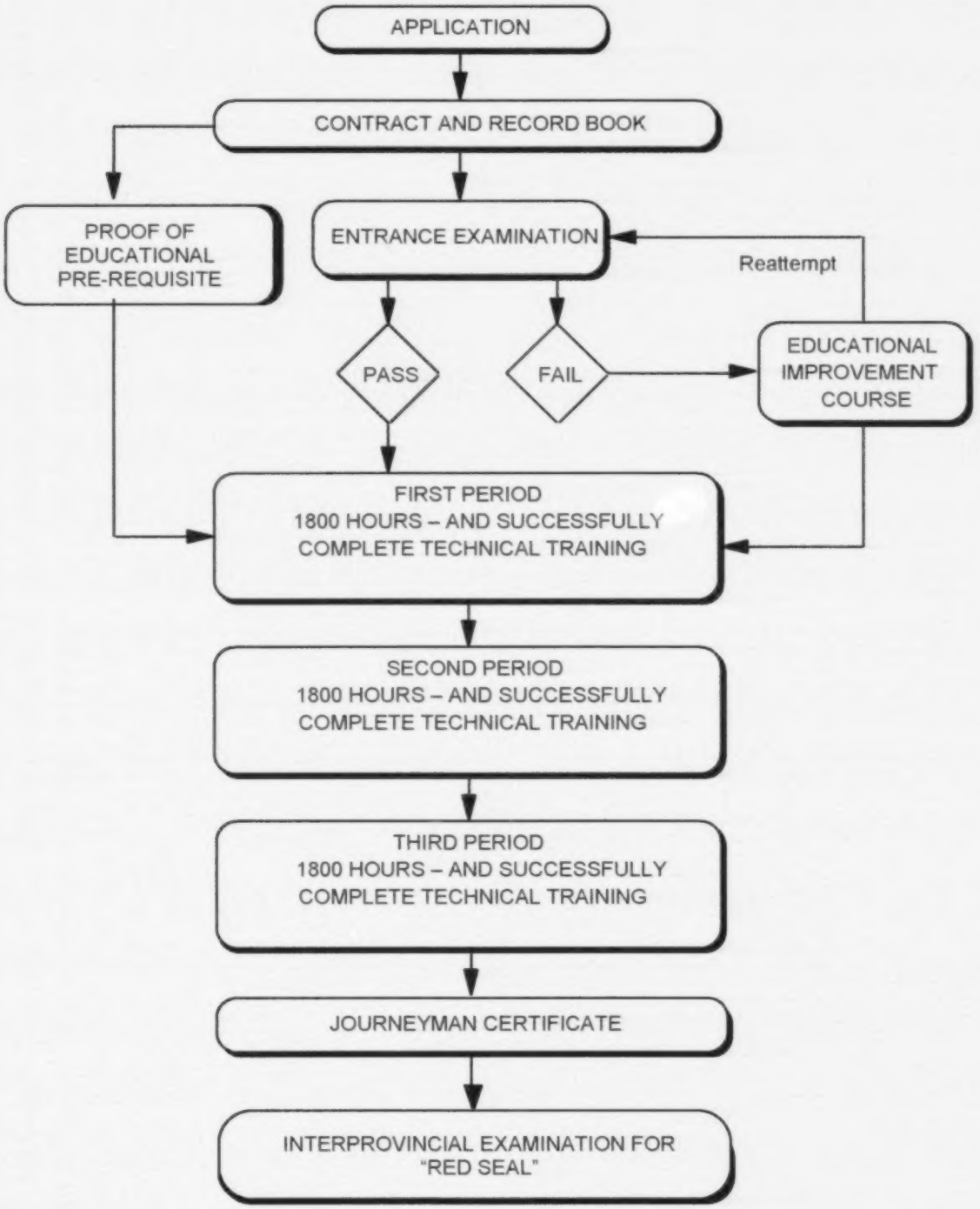
This course outline was approved on December 9, 2011 by the Alberta Apprenticeship and Industry Training Board on a recommendation from the Provincial Apprenticeship Committee. The valuable input provided by representatives of industry and the institutions that provide the technical training is acknowledged.

Any concerned individual or group in the province of Alberta may make recommendations for change by writing to:

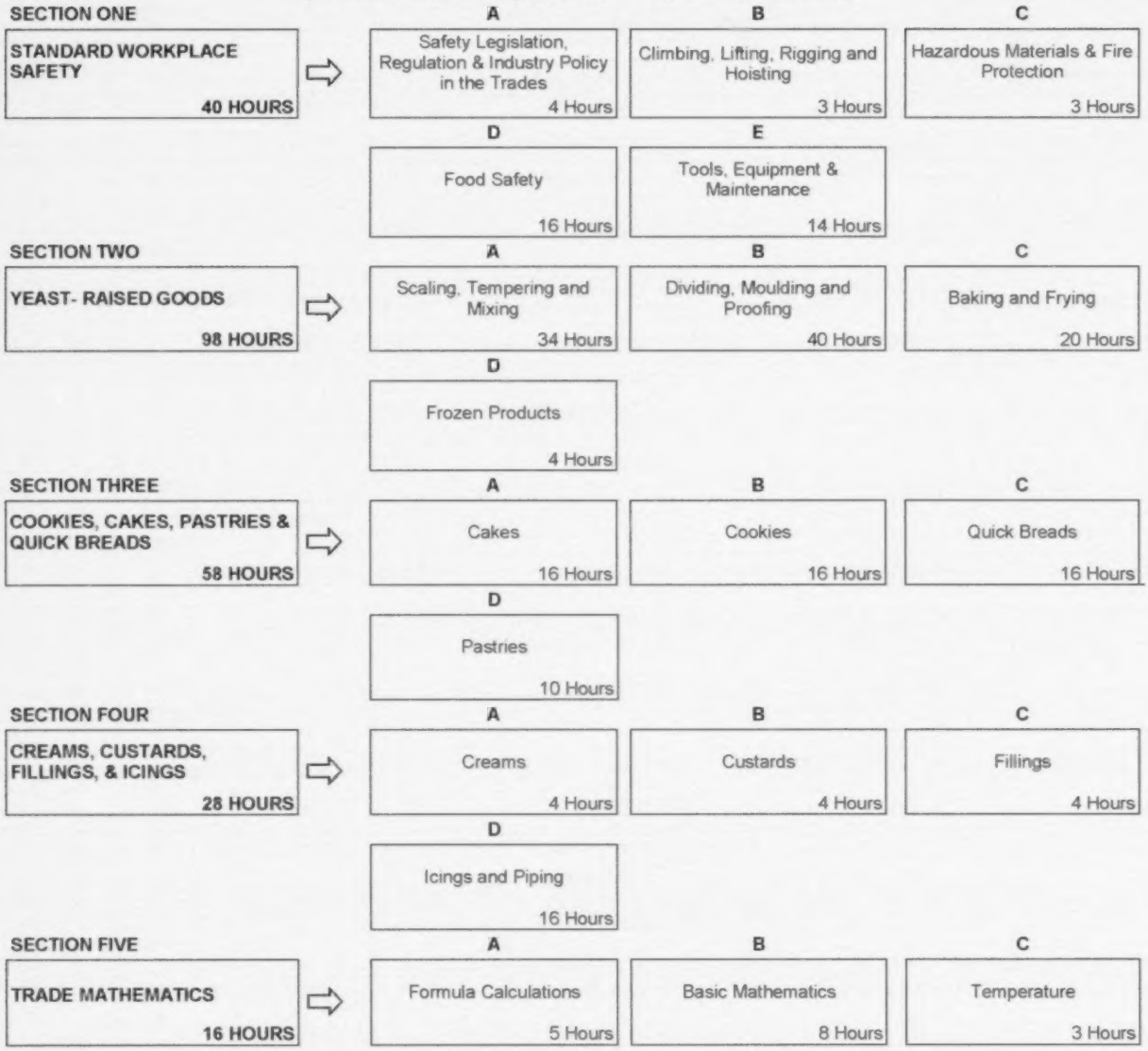
Baker Provincial Apprenticeship Committee
c/o Industry Programs and Standards
Apprenticeship and Industry Training
Advanced Education
10th floor, Commerce Place
10155 102 Street NW
Edmonton AB. T5J 4L5

It is requested that recommendations for change refer to specific areas and state references used. Recommendations for change will be placed on the agenda for regular meetings of the Baker Provincial Apprenticeship Committee.

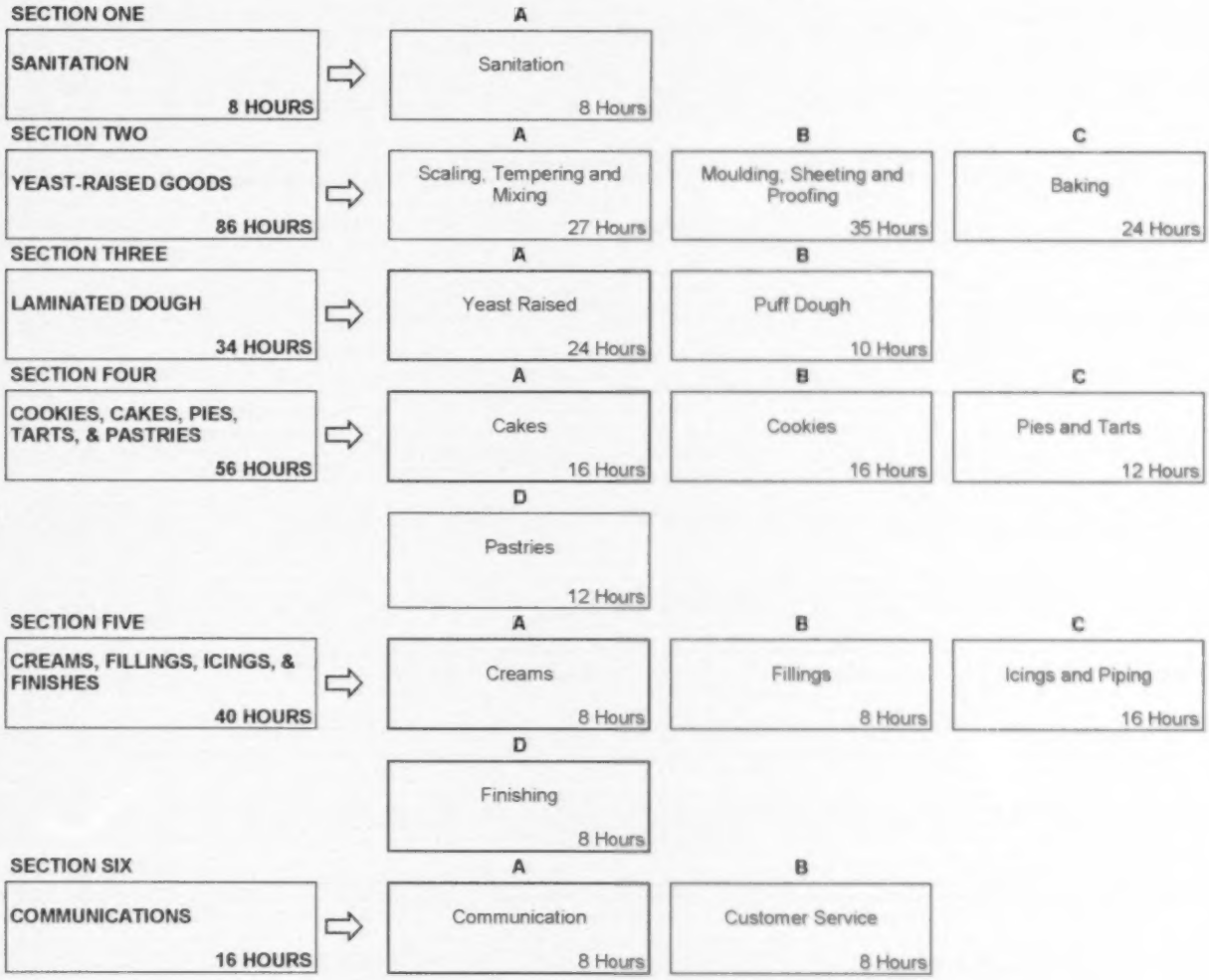
Apprenticeship Route toward Certification



Baker Training Profile
First Period
(8 Weeks 30 Hours per Week – Total of 240 Hours)



Second Period
(8 Weeks 30 Hours per week – Total of 240 Hours)



Third Period
(8 Weeks 30 Hours per week – Total of 240 Hours)

		A	B	C	D	E
SECTION ONE	**MANAGEMENT SKILLS 16 HOURS**	Management Skills 6 Hours	Production Planning 6 Hours	Regulations 2 Hours	Merchandising 2 Hours	
SECTION TWO	**YEAST-RAISED GOODS 116 HOURS**	Scaling, Tempering and Mixing 40 Hours	Moulding, Sheeting and Proofing 52 Hours	Baking 24 Hours		
SECTION THREE	**SAVORIES, CAKES & PASTRIES 54 HOURS**	Savoury Items 8 Hours	Advanced Cakes and Pastries 12 Hours	Wedding Cakes 16 Hours	Choux Paste 6 Hours	Decorated Cake 12 Hours
SECTION FOUR	**CHOCOLATES & CONFECTIONS 19 HOURS**	Chocolate 6 Hours	Confections 6 Hours	Sugar Modeling 7 Hours		
SECTION FIVE	**DESSERTS, ICE CREAMS & SORBETS 16 HOURS**	Production Methods for Frozen Products 4 Hours	Frozen Desserts 6 Hours	Plated Desserts 6 Hours		
SECTION SIX	**FOOD & NUTRITION 16 HOURS**	Science of Nutrition 6 Hours	Diets, Lifestyles and Trends 6 Hours	Food Labelling 4 Hours		
SECTION SEVEN	**ADVISORY NETWORK & WORKPLACE COACHING SKILLS 3 HOURS**	Workplace Coaching Skills 1 Hour	Advisory Network 1 Hour	Interprovincial Standards 1 Hour		

NOTE: The hours stated are for guidance and should be adhered to as closely as possible. However, adjustments must be made for rate of apprentice learning, statutory holidays, registration and examinations for the training establishment and Apprenticeship and Industry Training

FIRST PERIOD TECHNICAL TRAINING
BAKER TRADE
COURSE OUTLINE

UPON SUCCESSFUL COMPLETION OF THIS PROGRAM THE APPRENTICE WILL BE ABLE TO PERFORM THE FOLLOWING OUTCOMES AND OBJECTIVES.

SECTION ONE: ..... STANDARD WORKPLACE SAFETY ..... 40 HOURS

A. Safety Legislation, Regulation & Industry Policy in the Trades ..... 4 Hours

Outcome: ***Describe legislation, regulations and practices intended to ensure a safe work place in this trade.***

1. Demonstrate the ability to apply the Occupational Health and Safety Act, Regulation and Code.
2. Explain the role of the employer and employee in regard to Occupational Health and Safety (OH&S) regulations, Worksite Hazardous Materials Information Systems (WHMIS), fire regulations, Workers Compensation Board regulations and related advisory bodies and agencies.
3. Explain industry practices for hazard assessment and control procedures.
4. Describe the responsibilities of workers and employers to apply emergency procedures.
5. Describe positive tradesperson attitudes with respect to housekeeping, personal protective equipment and emergency procedures.
6. Describe the roles and responsibilities of employers and employees with respect to the selection and use of personal protective equipment (PPE).
7. Select, use and maintain appropriate PPE for worksite applications.

B. Climbing, Lifting, Rigging and Hoisting ..... 3 Hours

Outcome: ***Describe the use of personal protective equipment (PPE) and safe practices for climbing, lifting, rigging and hoisting in this trade.***

1. Select, use and maintain specialized PPE for climbing, lifting and load moving equipment.
2. Describe manual lifting procedures using correct body mechanics.
3. Describe rigging hardware and the safety factor associated with each item.
4. Select the correct equipment for rigging typical loads.
5. Describe hoisting and load moving procedures.

C. Hazardous Materials & Fire Protection ..... 3 Hours

Outcome: ***Describe the safety practices for hazardous materials and fire protection in this trade.***

1. Describe the roles, responsibilities features and practices related to the workplace hazardous materials information system (WHMIS) program.
2. Describe the three key elements of WHMIS.
3. Describe handling, storing and transporting procedures when dealing with hazardous material.
4. Describe safe venting procedures when working with hazardous materials.
5. Describe fire hazards, classes, procedures and equipment related to fire protection.

D. Food Safety ..... 16 Hours

Outcome: Complete an approved public health food safety course.

1. Identify causes of food borne illnesses.
2. Describe dietary allergies and intolerances.
3. Handle food in a safe manner.
4. Maintain a safe and sanitary work place.
5. Describe the basics of Hazard Analysis & Critical Control Points (HACCP) as it relates the baker trade.

E. Tools, Equipment and Maintenance ..... 14 Hours

Outcome: Identify and use tools and equipment.

1. Identify and demonstrate the correct use and maintenance of tools and equipment.
2. Demonstrate knowledge of location of electrical panels.
3. Demonstrate knowledge of gas, water and equipment shut offs.
4. Demonstrate ability to document and notify appropriate maintenance personnel.

SECTION TWO: ..... YEAST-RAISED GOODS ..... 98 HOURS

A. Scaling, Tempering and Mixing ..... 34 Hours

Outcome: Prepare basic doughs.

1. Prepare a variety of basic doughs and pre-ferment.
2. Describe ingredient function.
3. Identify the functions and various types of yeast.
4. Scale and measure ingredients accurately.
5. Mix and identify optimal dough development.
6. Identify required bench time.

B. Dividing, Moulding, Pinning and Proofing ..... 40 Hours

Outcome: Demonstrate the ability to develop consistent products.

1. Accurately scale product by hand or with dividing equipment.
2. Determine intermediate proof or retarding time.
3. Shape product by hand.
4. Identify a variety of product shapes and their related pans.
5. Use pinning and moulding equipment.
6. Determine final proof time.
7. Identify correct proof.
8. Prepare for baking.

C. Baking and Frying ..... 20 Hours

Outcome: Bake and fry a variety of yeast raised goods.

1. Determine required oven and fryer temperatures.
2. Determine required steam and vent times.
3. Determine baking times.
4. Describe par baking.
5. Identify correct degree of bake for each product.
6. Present and package a variety of finished product.

D. Frozen Products ..... 4 Hours

Outcome: Prepare and use a variety of frozen yeast raised goods.

1. Identify the differences between fresh and frozen doughs.
2. Identify storage techniques (FIFO).
3. Identify storage temperatures.
4. Preparation of frozen product prior to baking.
5. Determine final proof.
6. Determine baking times.
7. Present a variety of finished product.

SECTION THREE:.....COOKIES, CAKES, PASTRIES, & QUICK BREADS ..... 58 HOURS

A. Cakes ..... 16 Hours

Outcome: Prepare and bake basic cake batters.

1. Identify various cake making techniques.
2. Scale and measure ingredients accurately.
3. Describe ingredient function.
4. Describe ingredient and pan preparation.
5. Identify method of mixing various cake batters.
6. Describe leavening agents and their effects.
7. Determine baking time and temperature.
8. Identify cake faults.

B. Cookies..... 16 Hours

Outcome: Prepare and bake basic cookie doughs.

1. Produce various types of cookies.
2. Scale and measure ingredients accurately.
3. Describe ingredient function.
4. Identify ingredient and equipment preparation.
5. Identify various mixing methods.
6. Demonstrate portioning methods.

7. Determine baking time and temperature.
8. Identify cookie faults.
9. Present a variety of finished product.

C. Quick Breads ..... 16 Hours

Outcome: Prepare and bake basic quick breads.

1. Produce a variety of quick breads.
2. Scale and measure ingredients accurately.
3. Describe ingredient function.
4. Identify ingredient and equipment preparation.
5. Identify various mixing methods.
6. Identify fresh, frozen and dried fruit ingredients.
7. Demonstrate portioning methods.
8. Determine baking and frying times and temperatures.
9. Present a variety of finished product.

D. Pastries ..... 10 Hours

Outcome: Prepare and bake basic pastries.

1. Produce a variety of basic pastries and cake squares.
2. Scale and measure ingredients accurately.
3. Describe ingredient function.
4. Identify ingredient and equipment preparation.
5. Demonstrate various mixing methods.
6. Identify various fresh, frozen and dried fruit ingredients.
7. Demonstrate portioning methods.
8. Determine baking time and temperature.
9. Present a variety of finished product.

SECTION FOUR: ..... CREAMS, CUSTARDS, FILLINGS, & ICINGS ..... 28 HOURS

A. Creams ..... 4 Hours

Outcome: Prepare and use creams and butter creams.

1. Prepare various creams and butter creams.
2. Describe the uses of creams and butter creams.
3. Describe ingredient function.
4. Identify ingredient and equipment preparation.
5. Describe flavouring and colour agents.
6. Describe storage and handling of the product.

B. Custards ..... 4 Hours

Outcome: Prepare and cook custards

1. Identify ingredients.
2. Describe ingredient function.
3. Describe ingredient preparation.
4. Describe cooking methods.
5. Prepare and cook a variety of custards.
6. Describe the uses of custards.
7. Describe storage and handling of the product.

C. Fillings ..... 4 Hours

Outcome: Prepare and cook fillings.

1. Identify ingredients.
2. Describe ingredient function.
3. Describe ingredient preparation.
4. Describe cooking methods.
5. Describe fresh, frozen and dried ingredients.
6. Prepare and cook a variety of fillings.
7. Describe the uses of fillings.
8. Describe storage and handling of the product.

D. Icings and Piping and Decorating ..... 16 Hours

Outcome: Demonstrate the use of icing and piped forms.

1. Identify ingredients.
2. Describe ingredient function.
3. Describe ingredient preparation.
4. Describe mixing methods.
5. Prepare and use a variety of icings.
6. Use a variety of piping tips.
7. Perform basic piped shapes.
8. Describe the use of icings.
9. Identify flavouring and colour agents.
10. Describe storage and handling of the product.
11. Cut and divide layer cakes.
12. Coat, mask and decorate cakes.

SECTION FIVE: ..... TRADE MATHEMATICS ..... 16 HOURS

A. Formula Calculations ..... 5 Hours

Outcome: Perform formula calculations.

1. Calculate yields: given recipe, scaling weight and percentage loss.
2. Convert recipes to "Bakers Percentage" (ingredients based on flour being 100%).
3. Increase or decrease recipes to give a required yield i.e. required/old = new.

B. Basic Mathematics ..... 8 Hours

Outcome: Perform basic mathematic calculations.

1. Calculate and convert formulas using the Imperial, Metric and American System.
2. Alter formulation to compensate for altitude and water conditions.
3. Calculate percentages.
4. Calculate ratio and proportion.
5. Calculate yeast conversions.
6. Calculate ingredient cost, batch cost and overhead costs.
7. Calculate mark up, selling price, gross profit and gross margin.

C. Temperature ..... 3 Hours

Outcome: Perform temperature calculations.

1. Calculate machine friction.
2. Calculate required water temperature.

SECOND PERIOD TECHNICAL TRAINING
BAKER TRADE
COURSE OUTLINE

UPON SUCCESSFUL COMPLETION OF THIS PROGRAM THE APPRENTICE SHOULD BE ABLE TO PERFORM THE FOLLOWING OUTCOMES AND OBJECTIVES.

SECTION ONE: ..... SANITATION ..... 8 HOURS

A. SANITATION ..... 8 Hours

Outcome: Identify and prevent food spoilage.

1. Food preservation and storage.
2. Microbial spoilage of baked goods.
3. Describe the use and types of preservatives.

SECTION TWO: ..... YEAST RAISED GOODS ..... 86 HOURS

A. Scaling, Tempering and Mixing ..... 27 Hours

Outcome: Prepare doughs.

1. Prepare a variety of dough's and pre-ferments (scratch, premixes and bases).
2. Describe ingredient function.
3. Prepare ingredients.
4. Use appropriate yeast.
5. Scale and measure ingredients accurately.
6. Calculate required dough temperature (RDT).
7. Use required mixer bowl size per dough batch.
8. Mix and identify optimal dough development.
9. Identify required bench time.

B. Moulding, Sheeting and Proofing ..... 35 Hours

Outcome: Demonstrate the ability to produce consistent products.

1. Accurately portion product by hand.
2. Shape product by hand.
3. Determine intermediate proof or retarding time.
4. Produce a variety of product shapes using their related pans.
5. Use sheeting/moulding equipment.
6. Determine final proof time.
7. Demonstrate correct proof.
8. Prepare for baking.

C. Baking ..... **24 Hours**

Outcome: Bake a variety of yeast raised goods

1. Determine required oven temperatures.
2. Determine required steam and vent times.
3. Determine baking times.
4. Produce par baked product.
5. Prepare product to full bake.
6. Present a variety of finished product.
7. Identify bread faults.

SECTION THREE: LAMINATED DOUGH ..... **34 HOURS**

A. Yeast Raised ..... **24 Hours**

Outcome: Prepare and bake a variety of yeast raised laminated product.

1. Prepare ingredients and fats.
2. Describe ingredient function.
3. Use appropriate yeast.
4. Identify different formulas and laminating techniques.
5. Scale and measure ingredients accurately.
6. Calculate required dough temperature (RDT).
7. Mix and identify optimal dough development.
8. Determine intermediate proof and retarding time.
9. Demonstrate procedures for freezing (dough slab, individual portions).
10. Present a variety of finished product.

B. Puff Dough ..... **10 Hours**

Outcome: Prepare laminated puff dough.

1. Prepare ingredients and fats.
2. Describe ingredient function.
3. Identify different formulas and laminating techniques.
4. Scale and measure ingredients accurately.
5. Use required mixer bowl size per dough batch.
6. Mix and identify optimal dough development.
7. Determine retarding time between turns.
8. Demonstrate procedures for freezing (dough slab, individual portions).
9. Bake and present a variety of finished product.

SECTION FOUR:.....COOKIES, CAKES, PIES, TARTS, & PASTRIES..... 56 HOURS

A. Cakes.....16 Hours

Outcome: Prepare cakes using various production methods.

1. Produce a variety of cake batters (hi ratio, angel food, sponge, cheese cake, mousse cake).
2. Prepare pans.
3. Describe ingredient function.
4. Prepare and scale ingredients.
5. Mix various cake batters.
6. Demonstrate techniques of depositing batters (sheet cakes, layer cakes, cup cakes, angel food).
7. Determine baking time and temperature.
8. Determine doneness and cooling procedures.
9. Identify cake faults.
10. Present a variety of finished product.

B. Cookies.....16 Hours

Outcome: Prepare a variety of fancy cookies.

1. Produce various types of cookies (meringue, short bread, ice box).
2. Scale and measure ingredients accurately.
3. Describe ingredient function.
4. Prepare ingredients.
5. Mix cookie doughs.
6. Demonstrate all portioning methods.
7. Determine baking time, temperature and doneness.
8. Identify cookie faults.
9. Present a variety of finished and fancy product.

C. Pies and Tarts.....12 Hours

Outcome: Prepare and present pies & tarts.

1. Prepare and mix ingredients.
2. Describe ingredient function.
3. Describe blocking methods.
4. Describe par baking crusts/shells.
5. Deposit fillings (fruit, cream, mousse, sugar filling, butter tart).
6. Determine baking time, temperature and doneness.
7. Present a variety of finished product.

D. Pastries ..... 12 Hours

Outcome: Prepare and present pastries.

1. Produce a variety of pastries.
2. Scale and measure ingredients accurately.
3. Describe ingredient function.
4. Identify ingredient and equipment preparation.
5. Identify various mixing methods.
6. Describe fresh, frozen and dried fruit ingredients.
7. Describe of portioning methods.
8. Determine baking time and temperature.
9. Present a variety of finished product.

SECTION FIVE: ..... CREAMS, FILLINGS, ICINGS, & FINISHES ..... 40 HOURS

A. Creams ..... 8 Hours

Outcome: Prepare creams for fillings.

1. Prepare ingredients.
2. Describe ingredient function.
3. Demonstrate the uses of creams.
4. Mix ingredients.
5. Identify faults.
6. Use flavouring and colour agents.
7. Demonstrate storage and handling of the product.

B. Fillings ..... 8 Hours

Outcome: Prepare and cook fillings.

1. Describe ingredient function.
2. Scale and measure ingredients accurately.
3. Mix ingredients.
4. Produce various types of fruit fillings.
5. Produce various types of custard fillings.
6. Produce cooked and non-cooked fillings.
7. Demonstrate portioning.
8. Determine cooking time, temperature and doneness.
9. Demonstrate storage and handling of the product.
10. Present a variety of product.

C. Icings and Piping ..... 16 Hours

Outcome: Demonstrate the use of icing and piped forms in the finishing of product.

1. Describe ingredient function.
2. Mix and pipe a variety of icings.
3. Perform piped shapes using a variety of piping tips (flowers, borders, rosettes, lines, writing).
4. Demonstrate the use of icings.
5. Use flavouring and colour agents.
6. Demonstrate storage and handling of the product.

D. Finishing ..... 8 Hours

Outcome: Apply appropriate finishes to product.

1. Apply special effects:
    a) stencils
    b) airbrush to create unique effects
    c) edible transfers.
2. Use various finishing techniques (coating, dipping, masking).
3. Describe basic plating techniques.

SECTION SIX: ..... COMMUNICATIONS ..... 16 HOURS

A. Communication ..... 8 Hours

Outcome: Demonstrate effective communication.

1. Develop effective listening skills.
2. Be familiar with one way and two way communication.
3. Be aware of the many communication barriers.
4. Use job seeking skills.
5. Identify effective goal setting.

B. Customer Service ..... 8 Hours

Outcome: Demonstrate effective customer service.

1. Demonstrate effective customer relations.
2. Be aware of the effects of customer service in the success or failure of a business.
3. Use effective message taking techniques.

THIRD PERIOD TECHNICAL TRAINING
BAKER TRADE
COURSE OUTLINE

UPON SUCCESSFUL COMPLETION OF THIS PROGRAM THE APPRENTICE SHOULD BE ABLE TO PERFORM THE FOLLOWING OUTCOMES AND OBJECTIVES.

SECTION ONE: ..... MANAGEMENT SKILLS ..... 16 HOURS

A. Management Skills ..... 6 Hours

Outcome: Apply management strategies.

1. Promote good staff relations.
2. Promote team concept.
3. Describe various management styles.
4. Develop a bakery budget.
5. Discuss entrepreneurship and business opportunities.

B. Production Planning ..... 6 Hours

Outcome: Apply the ability to plan an effective production schedule.

1. Understand process flow and bakery layout.
2. Develop a production schedule.
3. Determine required equipment for production.
4. Identify facility limitations.
5. Demonstrate staff scheduling.
6. Recognize staff abilities.

C. Regulations ..... 2 Hours

Outcome: Have an awareness of Provincial and Federal regulations.

1. Describe the government regulations for the Alberta Employment Standards Act.
2. Describe the government regulations for Provincial legislation.
3. Describe the government regulations for the Worker's Compensation Board (WCB).
4. Describe the government regulations for Canadian Food Inspection Agency (CFIA).

D. Merchandising ..... 2 Hours

Outcome: Understand the importance of product promotion.

1. Demonstrate merchandising.
2. Describe various packaging.
3. Use product sampling.

SECTION TWO .....YEAST-RAISED GOODS ..... 116 HOURS

A. Scaling, Tempering and Mixing .....40 Hours

Outcome: Prepare specialty yeast raised products.

1. Prepare advance doughs and pre-ferments.
2. Prepare ingredients.
3. Describe ingredient function.
4. Use appropriate yeast.
5. Scale and measure ingredients accurately.
6. Calculate required dough temperature (RDT).
7. Mix and identify optimal dough development.
8. Identify required bench time.

B. Moulding, Sheeting and Proofing .....52 Hours

Outcome: Demonstrate the ability to develop consistent products.

1. Accurately scale product by hand.
2. Shape product by hand.
3. Determine intermediate proof or retarding time.
4. Identify a variety of product shapes and their related pans.
5. Use dividing equipment.
6. Use moulding equipment.
7. Use sheeting equipment.
8. Determine final proof time.
9. Demonstrate correct proof.
10. Prepare for baking.

C. Baking.....24 Hours

Outcome: Bake specialty yeast raised goods.

1. Determine required oven temperatures.
2. Determine required steam and vent times.
3. Determine baking times.
4. Produce par baked product.
5. Prepare product to full bake.
6. Present a variety of finished product.
7. Identify bread faults.

SECTION THREE: SAVORIES, CAKES, & PASTRIES ..... 54 HOURS

A. Savoury Items ..... 8 Hours

Outcome: Produce a variety of savoury products.

1. Describe ingredient function.
2. Prepare ingredients.
3. Prepare various savoury products.
4. Bake various savoury products.
5. Demonstrate food safe procedures.

B. Advanced Cakes and Pastries ..... 12 Hours

Outcome: Prepare a variety advanced cakes and pastries.

1. Describe ingredient function.
2. Prepare ingredients.
3. Prepare various advanced cakes and pastries products.
4. Bake various advanced cakes and pastries products.

C. Wedding Cakes ..... 16 Hours

Outcome: Prepare and present a finished wedding cake.

1. Prepare a tiered wedding cake.

D. Choux Paste ..... 6 Hours

Outcome: Prepare choux paste.

1. Describe ingredient function.
2. Prepare ingredients.
3. Prepare various choux paste products.
4. Bake various choux paste products.
5. Identify choux faults.

E. Decorated Cakes ..... 12 Hours

Outcome: Decorate cakes and specialty tortes using a variety of styles.

1. Present a cake with borders, flowers and writing.
2. Apply air brushing techniques.
3. Decorate with almond paste.

SECTION FOUR: CHOCOLATE & CONFECTIONS ..... 19 HOURS

A. Chocolate ..... 6 Hours

Outcome: Prepare chocolate for use in a variety of applications.

1. Identify the different types of chocolate.
2. Describe ingredient function.
3. Temper couverture chocolate.

4. Use covertures and compound chocolate.
5. Prepare ganache.
6. Prepare modeling chocolate.
7. Prepare piping chocolate.

B. Confections ..... 6 Hours

Outcome: Identify the preparation of various confections.

1. Identify boiling stages and temperatures.
2. Identify effects of acids and invert sugars and their applications.
3. Identify types of confections such as fudge, caramels, gelées, candied peels and soft and hard candies.
4. Identify ingredients such as flavourings and colourings.

C. Sugar Modeling ..... 7 Hours

Outcome: Identify sugar modeling techniques.

1. Identify various ingredients for cooking sugar.
2. Identify storage procedures for sugar and showpieces.
3. Observe basic pulling techniques.
4. Observe sugar blowing techniques, piping, spun sugar, casting and flower making.
5. Identify tools and equipment.

SECTION FIVE ..... DESSERTS, ICE CREAMS & SORBETS ..... 16 HOURS

A. Production Methods for Frozen Products ..... 4 Hours

Outcome: Describe the assembly of components for desserts, ice creams and sorbets.

1. Identify alcohol, sugar and fat content.
2. Describe ingredient function.
3. Describe formulations for syrup and custard bases.
4. Identify flavourings for bases.
5. Describe overrun.
6. Identify desired end product.
7. Describe holding and long term storage temperature.

B. Frozen Desserts ..... 6 Hours

Outcome: Prepare frozen desserts.

1. Identify frozen desserts such as parfaits, frozen soufflés and bombes.
2. Describe frozen dessert components.
3. Describe the effects of freezing on food product characteristics such as texture and flavour.
4. Assembles components for frozen desserts.
5. Ability to un-mould frozen desserts.

6. Ability to store finished products.
7. Present a variety of frozen desserts.

C. Plated Desserts ..... 6 Hours

Outcome: Prepare and present a variety of plated desserts.

1. Plans plate design.
2. Identify plate balance such as height, focal point, textures, flavours and number of components.
3. Prepares components.
4. Describe portion control.
5. Ability to follow plate design plan.
6. Ability to apply sauces and garnishes in an attractive manner.
7. Present a variety of plated desserts.

SECTION SIX: ..... FOODS & NUTRITION ..... 16 HOURS

A. Science of Nutrition ..... 6 Hours

Outcome: Describe the nutritional importance of ingredients.

1. Describe the nutritional importance of fat and edible oil.
2. Describe the nutritional importance of proteins.
3. Describe the nutritional importance of carbohydrates.
4. Describe the nutritional importance of water.
5. Describe the nutritional importance of fibre.
6. Describe the nutritional importance of sugars.

B. Diets, Lifestyles and Trends ..... 6 Hours

Outcome: Be familiar with the Canada Food Guide and dietary options.

1. Describe the vegetarian diets.
2. Describe ethnic and religious diets.
3. Describe natural and organic food production.
4. Describe modified food production.
5. Describe dietary allergies and intolerances.
6. Describe dietary options and restrictions.
7. Modify formulas according to dietary concerns.
8. Interpret food labelling terminology.

C. Food Labelling ..... 4 Hours

Outcome: Identify and understand food labels.

1. List labelling requirements.
2. Identify required nutritional information.
3. Ability to understand food labels.

SECTION SEVEN: .....ADVISORY NETWORK & WORKPLACE COACHING SKILLS ..... 3 HOURS

A. Workplace Coaching Skills ..... 1 Hours

Outcome: Display coaching skills.

1. Describe coaching skills used for training apprentices.

B. Advisory Network ..... 1 Hours

Outcome: Describe the advisory network.

1. Explain the role and purpose of the advisory network, local apprenticeship committees and the provincial apprenticeship committee.

C. Interprovincial Standards ..... 1 Hours

Outcome: Discuss Red Seal / Interprovincial standards.

1. Describe the National Occupational Analysis. (NOA).
2. Describe the relationship between the NOA and Red Seal / Interprovincial examinations.
3. Discuss the roles of federal and provincial government in the development of Red Seal standards.
4. Discuss the role of industry in the development of Red Seal standards.
5. Explain the intent of the Red Seal examination as it relates to interprovincial mobility.
6. Describe sources of information on Red Seal standards and practice examinations.

Apprenticeship and Industry Training

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